

Application No.: 10/759814

Docket No.: IM1315USNA

Page 8

REMARKS

Reconsideration of this application is respectfully requested.

Claims 75 through 77 have been amended to more clearly define the invention. There has been no change in substance and no new matter is involved since the basis for the amendment is found in the specification for Claim 75 on page 12 at lines 26 through 28; for Claim 76 on page 11 at lines 21 and 22; and for Claim 77 on page 13 at lines 12 through 27.

The rejection of Claims 31 through 43, 52 through 66 and 74 through 77 as being unpatentable over Johnson et al. (WO 01/18604), under 35 U.S.C. 103(a), is respectfully traversed. Claim 31 recites that means for collecting the vapor is located *at the means for supplying the absorbent material to the exterior surface of the composition layer*. Collecting the vapor at the means for supplying is described in the specification on page 9 at lines 7 through 20, and shown in the embodiment represented by Figure 1. Claim 31 is not obvious from the disclosure of Johnson et al. since Johnson et al. do not teach or suggest having a means for collecting the vapor at the means for supplying the absorbent material to the exterior surface of the composition layer. Johnson et al. do not teach or suggest a collection means, such as a vent, plenum, or shroud, at the location where the absorbent material is supplied to the exterior surface of the composition layer.

The Examiner has stated that Applicants' claimed apparatus is merely a mechanical modification and is therefore an obvious expedient over the configuration disclosed by Johnson et al. However, Johnson et al. do not acknowledge any problems with vapor forming condensate throughout the apparatus, and thus do not teach or even suggest structural elements in the apparatus to handle condensate formed from the vapor throughout the apparatus. The blower 356 and the optional shroud 358 in Johnson et al. that extends around the drum in close proximity to surface 22 of the drum are part of a cooling means 355 for cooling the photosensitive element. Johnson et al. do not teach or suggest that the blower and optional shroud could provide any other function other than for cooling of the photosensitive element. The machine frame is ventilated by a vacuum fan unit 368, which forms a plenum with the underpart of conveyor 144a, to control fumes from heating the composition layer on the sheet. The inlets for the unit 368 are along the bottom of the unit such as through a plurality of inlets 369. Johnson et al. acknowledge that the vacuum fan unit is used to control fumes from heating of the photosensitive element, but the inlets to the plenum and the vacuum fan unit are remote from where the vapors are generated. Thermal development processors having the vacuum fan unit exhausting air from inside the processor as disclosed by Johnson

Application No.: 10/759814

Docket No.: IM1315USNA

Page 9

et al. have only limited success in managing the vapor and condensate. Johnson et al. fail to acknowledge that the vapors can remain within the processor and then condense and drip uncontrolled onto different areas within the processor, and even onto the photosensitive element.

Johnson et al. fail to teach or even suggest that vapor is most likely to form when the composition layer is reaching or reaches the temperature to liquefy. Johnson et al fail to teach or even suggest that the vapor may be collected where the vapor is most likely to form at the nip where the exterior surface of the photosensitive element contacts the absorbent material. Collecting the vapor at the means for supplying is described in the present specification on page 9 at lines 7 through 20, and shown in an embodiment represented by Figure 1.

Applicants specifically indicate in lines 15 through 19 to collect the vapor where the photosensitive element contacts the absorbent material, *i.e., at the means for supplying*, since the vapor is most likely to form when the composition layer is reaching or reaches the temperature to liquefy.

The Examiner asserts that a change in the arrangement or location of mechanical elements represents an obvious expedient and that mechanical equivalents would be merely a matter of choice to one of ordinary skill in the art. But since Johnson et al. fail to discover that: 1) there are problems with vapor forming condensate throughout the apparatus; 2) vapor is most likely to form when the composition layer is reaching or reaches the temperature to liquefy; and 3) vapor is likely to form at the nip where the exterior surface of the photosensitive element contacts the absorbent material, there is no motivation to one of ordinary skill in the art to make such a change in the arrangement or location of mechanical elements. It is insufficient to assert that it is obvious to change the location or arrangement of mechanical elements disclosed in a prior art apparatus unless there is some clear reasoning or motivation in the reference to suggest to one of ordinary skill in the art to try the claimed invention. Thus, Claim 31 is not obvious from the disclosure of Johnson et al. since Johnson et al. do not acknowledge the above-mentioned problems with vapor forming condensate throughout the apparatus, and thereby do not teach or suggest having a means for collecting the vapor at the means for supplying the absorbent material to the exterior surface of the composition layer.

Regarding independent Claims 75 through 77, Johnson et al. fail to teach or even suggest that vapor is most likely to form when the composition layer is reaching or reaches the temperature to liquefy. Applicants specifically indicate on page 9 at lines 7 through 15 to

Application No.: 10/759814

Docket No.: IM1315USNA

Page 10

collect the vapor as the vapor emits from the photosensitive element while the element is being heated, i.e., *at the heating means*, since the vapor is most likely to form when the composition layer is reaching or reaches the temperature to liquefy. Even if one were to arguably construe the plenum or shroud of Johnson et al. as a means for collecting the vapor at or adjacent the heating means, Johnson et al. do not teach or suggest a separation unit for removing vapor from air, a means for confining the collected vapor in a vertical orientation, or a means for maintaining the collected vapor in its vaporized state. Johnson et al. do not teach or suggest *a separation unit for removing the collected vapor and the collected vapor that condenses to form condensate from the air*, as recited in Claim 75. Even if one were to construe the plenum or shroud of Johnson et al. as a means for collecting the vapor at or adjacent the heating means, Johnson et al. clearly do not teach or suggest a separation unit for managing the removal of the vapor, vapor and condensate, or condensate from the air.

Regarding Claim 76, Johnson et al. do not teach or suggest a means for confining the collected vapor and the collected vapor that condenses to form condensate, *which is connected to the collecting means and oriented vertically or substantially vertically so that the condensate flows under gravity for removal from the apparatus*. Even if one were to construe the shroud or plenum of Johnson et al. as a means for collecting the vapor at or adjacent the heating means, Johnson et al. do not suggest a means for confining the collected vapor and/or condensate in a vertical orientation so that the condensate flows under gravity for removal from the apparatus. In Figure 15 of Johnson, the shroud 358 arguably may direct the vapor, but does not confine the vapor (or condensate) in a vertical orientation for gravity flow removal from the apparatus. Also, the plenum under the conveyor 144a arguably may collect the vapor, but does not confine the vapor (or condensate) in a vertical orientation for gravity flow removal from the apparatus.

Regarding Claim 77, Johnson et al. do not teach or suggest *a means for maintaining the collected vapor in its vaporized state, and a means for managing the removal of the collected vapor through a filter*. Johnson et al. disclose only that the machine is ventilated by a vacuum fan unit 368 which forms a plenum with the underpart of the conveyor to control fumes from heating the composition layer on the sheet. The exhaust from the unit 368 is vented through a conduit 370. The inlets for the unit are along the bottom of the unit at a plurality of inlets 369 and 371. Johnson et al. do not teach or suggest maintaining the collected vapor in its vaporized state nor managing the removal of the collected vapor through a filter.

Application No.: 10/759814

Docket No.: IM1315USNA

Page 11

The rejection of Claims 45 through 48 as being unpatentable over Johnson et al. in view of Applicants admitted prior art, under 35 U.S.C. 103(a), is respectfully traversed. Claims 45 through 48 either directly or indirectly depend from independent Claim 31 and thereby incorporate the limitation of the means for collecting the vapor at the supplying means. Johnson et al. alone or in combination with the prior art do not teach or suggest means for collecting the vapor *at the supplying means* and having all or a portion of the collected vapor form condensate for collection in a pan. Regarding Claim 48, Johnson et al. in combination with the prior art suggests only exhausting air with vapor (not collected at the supplying means) with a vacuum fan unit under which resides the collection pan. Johnson et al. alone or in combination with the prior art do not teach or suggest other means for collecting the condensate including the use of piping materials in which the condensate is soluble, pumping the condensate from the apparatus, dispensing the condensate onto a condensate absorbent material, and exposing the condensate to actinic radiation (see page 14 at line 25 to page 15 at line 29).

Further regarding Claim 45, Johnson et al. alone or in combination with the prior art do not teach or suggest means for confining the vapor and the condensate. To confine is to hold within a location, and clearly the prior art did not confine the vapor (within the processor) or the condensate (within the pan) since according to the description of the prior art in the specification page 3 at lines 17 through 22, the vapor escaped with the exhaust air and the vapor condensed prior to reaching the condensate pan.

Further regarding Claim 46, Johnson et al. alone or in combination with the prior art do not teach or suggest means for managing removal of the vapor and the condensate from the apparatus. Means for managing removal of the vapor and the condensate are described in the specification on page 12 at line 19 through page 15 at line 29, and specifically include, for example, a separation unit 70, filtration, minimizing air flow disturbances, use of piping materials in which the condensate is soluble, pumping the condensate from the apparatus, dispensing the condensate onto a condensate absorbent material, and exposing the condensate to actinic radiation. Furthermore, regarding Claim 47, Johnson et al. alone or in combination with the prior art do not teach or suggest means for separating the vapor from the condensate, particularly as described in embodiments of the separation unit and filtration.

The allowance of Claims 32 through 43 and 45 through 74 appears to be in order for at least the reasons given above with respect to Claim 31 since such claims depend from Claim 31 and thereby incorporate the patentable novelty of Claim 31.

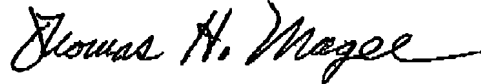
Application No.: 10/759814

Docket No.: IM1315USNA

Page 12

Reconsideration and allowance of this application are respectfully requested.

Respectfully submitted,



THOMAS H. MAGEE
ATTORNEY FOR APPLICANTS

Registration No. 27,355

Telephone: (302)892-0795

Facsimile: (302)892-7949

Dated: November 26, 2007